

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554

NOV 14 2000

FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

In the Matter of)	
)	
Deployment of Wireline Services Offering)	
Advanced Telecommunications Capability)	CC Docket No. 98-147
)	
and)	
)	
Implementation of the Local Competition)	CC Docket No. <u>96-98</u>
Provisions of the)	
Telecommunications Act of 1996)	

REPLY COMMENTS OF APTONIX, LTD.

Aptonix Ltd. ("Aptonix"), by its attorneys, hereby replies to comments filed by interested parties responding to the Commission's *Further Notice of Proposed Rulemaking*¹ concerning collocation, including the collocation of competitive local exchange carriers ("CLECs") in remote terminals deployed or controlled by incumbent local exchange carriers ("ILECs"). Aptonix supports the Commission's efforts to promote the public interest in a competitive telecommunications industry and the deployment of advanced services capability to all Americans. In these Reply Comments, Aptonix seeks to add additional information to the record

¹ *Deployment of Wireline Services Offering Advanced Telecommunications Capability*, CC Docket 98-147, and *Implementation of the Local Competition Provisions of the Telecommunications Act of 1996*, CC Docket No. 96-98, *Order on Reconsideration and Second Further Notice of Proposed Rulemaking* in CC Docket No. 98-147 and

(footnote continued to next page)

in this proceeding in order to enable the Commission to better comprehend the range of innovative technological solutions offered by independent equipment companies – Aptonix, in particular – that provide carrier-class transmission equipment answering the specialized needs of carriers seeking to provide next-generation digital loop carrier (“NGDLC”) services over the public switched telecommunications network (“PSTN”).

Aptonix, a spin-off from Telrad Networks, develops and produces carrier-grade Broadband mini-Integrated Access Platforms (“BIAPs”). These BIAP “mini-shelf” platforms offer a new, compact solution that maximizes the ability of multiple carriers to efficiently utilize the limited available collocation space in central offices and remote terminals. In particular, the Aptonix Whizard™ Platform² provides an outstanding solution for fast deployment of access lines for carriers providing local exchange service in legacy and NGDLC environments.

Aptonix’s Whizard™ Platform has a compact yet scalable design offering high port density and compatibility with both legacy and NGDLC telecommunications networks. The Whizard™ Platform’s performance, reliability, and price make this equipment ideal for low line-count applications such as residential, secondary, and rural markets.

The Whizard™ Platform is true multi-function equipment, offering NGDLC capability; a mini-DSLAM that can support ADSL, G.Lite, SDSL, or VDSL; ATM switching or IP routing capability; and the ability to act as a media gateway to a soft switch in a pure-packet environment. Moreover, the Whizard™ Platform provides enhanced voice capabilities including

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Fifth Further Notice of Proposed Rulemaking in CC Docket No. 96-98, FCC 00-297 (rel. Aug. 10, 2000) (“FNPRM”)

voice over IP, DSL, or ATM. The Whizard™ Platform also supports life-line functionality and advanced EMS in NGDLC networks.

Finally, the Whizard™ Platform accommodates a wide variety of subscriber value-added services. All traffic is terminated within the Whizard™, resulting in unlimited potential for individual service providers to provide innovative services to their customers.

Aptonix presents this information to the Commission to demonstrate that independent manufacturers are already at work, developing innovative technological solutions to the practical problems posed by competitive collocation and the deployment of NGDLC transmission capability. Aptonix believes that the Commission should support and facilitate these innovative technological solutions through the adoption of competition-enhancing collocation rules and a technology-neutral approach to the deployment of advanced services capability.

Respectfully Submitted,

APTONIX LTD.

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November 14, 2000

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² See Appendix.

ATTACHMENT



leading the way

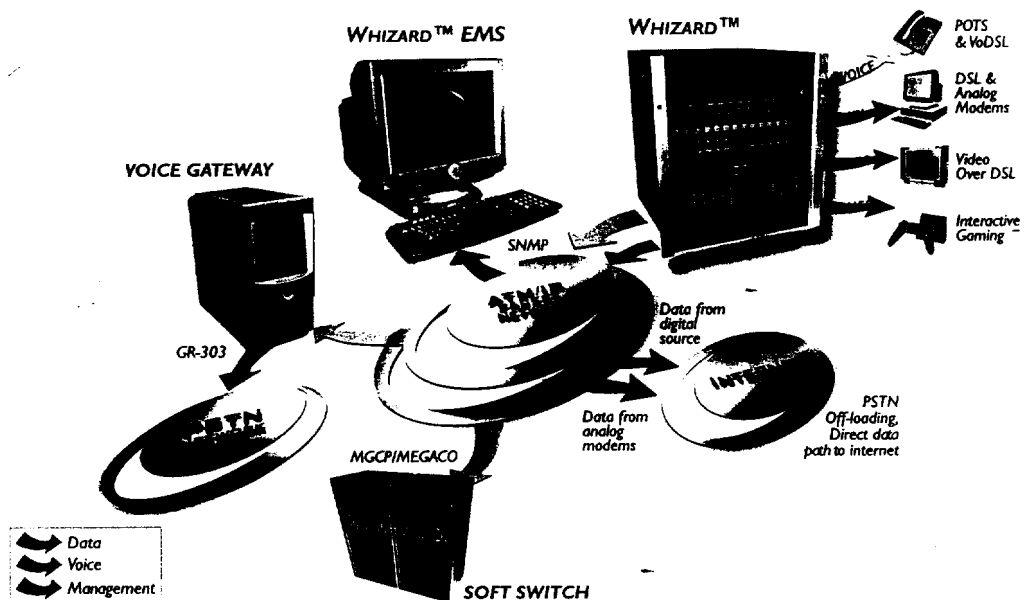
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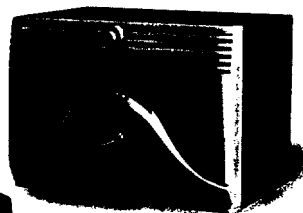
networks

- Scalable and optimized for low line-count applications
- Ideal for small businesses, SOHO, MTU/MDU and residential customers
- POTS lifeline support
- Full redundancy
- Eliminates the need for CO Point-of-Presence
- Overcomes the 18Kft barrier
- Plug & play installation in Packet-Based Networks

-
- The diagram illustrates the WHIZARD™ network architecture. At the center is a large computer tower labeled **WHIZARD™**. To its left, a desktop computer is connected via a line labeled **SNMP**. Below the tower, a telephone is connected via a line labeled **250Kbps**. To the right of the tower, four arrows point to different services: **VOICE** (with a telephone icon), **POTS & VoD**, **DSL & Analog Modem** (with a computer icon), **Video Over IP** (with a monitor icon), and **Internet Gaming** (with a joystick icon). At the bottom, a circular disk labeled **INTERNET** is connected to the tower via a line labeled **Data from digital source**. Another line labeled **Data from analog modems** also points to the **INTERNET** disk. Below the disk, text reads: **PSTN Off-loading, Direct data path to internet**.

WHIZARD™ EMS WHIZARD™





Wall Mount enclosure



Distributed Network Architecture

Over a packet-based ATM/IP backbone, including:

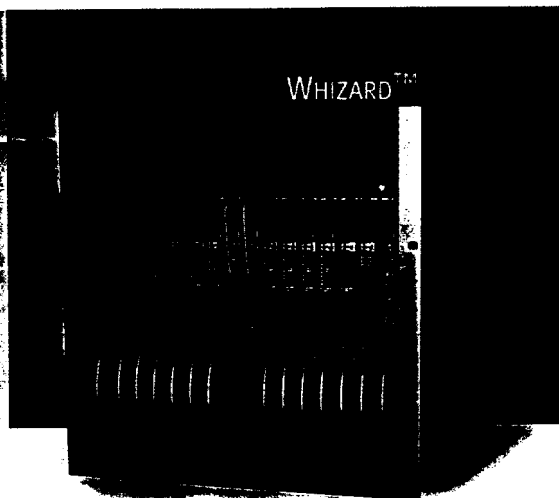
WHIZARD™ - For handling voice, internet, data and video traffic and routing it to the uplink network.

WHIZARD™ EMS - For management tasks.

Voice Gateway - For transferring voice traffic from WHIZARD™ units to the PSTN. The Voice Gateway equipment is supplied by Aptonix partners.

Cross-network Connectivity

WHIZARD™ seamlessly interconnects a PSTN to any private or Public Data Network. Voice is handled either by a Soft Switch in Next-generation Networks or by a Class 5 switch.



Combined Functionality

- Next-generation Broadband DLC
- Mini-DSLAM: ADSL, G.Lite, SDSL, VDSL
- ATM Switch or IP Routing
- Media Gateway (to a soft switch in a pure-packet environment)

End-to-End Quality Of Service (QoS)

The ATM/IP packet backbone guarantees end-to-end QoS and SLA (Service Level Agreement).

Enhanced Voice Capabilities

- Provides competitive voice capabilities for service providers:
- Voice over DSL (VoDSL)
- Voice over ATM (VoATM)
- Voice over IP (VoIP)
- CVoDSL ready

Service-enhanced Platform

Accommodates a wide variety of subscriber value added services. All traffic is terminated within the WHIZARD™, resulting in unlimited potential for service providers to create new services and generate additional revenues.

Remote xDSL Performance

Customers distant from CO will become "VDSL Ready" for the provision of enhanced video services, thanks to near-customer WHIZARD™ installation. WHIZARD™ wall-mount and street-cabinet enclosures make this feasible.



Aptonix Ltd.

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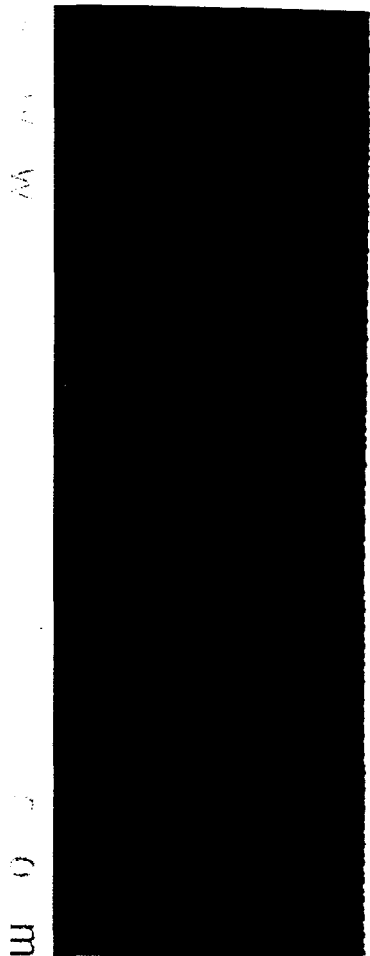
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CERTIFICATE OF SERVICE

I, Mary W. Malone, do hereby certify that I have caused 1) the forgoing **REPLY COMMENTS OF APTONIX LTD.** to be served, via hand delivery, upon the persons/entities listed on the attached service list.

November 14, 2000

CERTIFICATE OF SERVICE

I hereby certify that a copy of the foregoing Section 63.19 Notification was delivered by messenger on this 14 day of November, 2000, to the following individuals:

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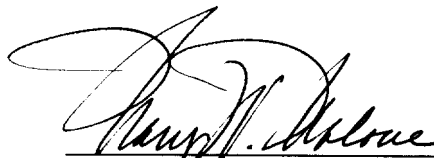
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